



Work Order ID 71422



Monday, July 04, 2011 10:46:27 AM



Page 2

Item ID: D4153-1 Accept  Setup Start 
Revision ID: Stop 
Item Name: Joggle Bracket
Start Date: 7/5/2011 Start Qty: 4.00 
Required Date: 7/19/2011 Req'd Qty: 4.00 
Reference: Cust Item ID:
Customer:

Approvals: Process Plan: Date: Tooling: Date: Run Start 
QC: Date: SPC (Y/N): Date: Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		- inspected to PBI Dg only 8/11/07/25 (4)					
140  Brake NC Brake NC	Form as per dwg Memo	0.00 0.00		SB 11/07/25 (4)					



Work Order ID 71422-2



Monday, July 04, 2011 10:46:27 AM



Page 1

Item ID: D4153-1 Accept  Setup Start 
Revision ID: Stop 
Item Name: Joggle Bracket
Start Date: 7/5/2011 Start Qty: 4.00 
Required Date: 7/19/2011 Req'd Qty: 4.00 
Reference: Cust Item ID:
Customer:

Approvals: Process Plan: *mp* Date: *11-07-04* Tooling: Date: Run Start 
QC: Date: SPC (Y/N): Date: Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110  Waterjet FLOW CNC Waterjet <i>304 .050</i>	Revision Nbr A U/R <i>Rev</i> <i>PBI</i> Memo CUT AS DWG DWG REV: <i>PBI</i> PROG REV: <i>PBI</i> DEBURR	0.00 0.00		<i>Rev A.</i> <i>4/11.07.05 MAKE PER Rev A.</i>					
120  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00		<i>B11-7-5</i> <i>B11-7-5</i>					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\FORMS\Quality Assurance\approved QANCRWO RevE

Work Order ID 71422

Monday, July 04, 2011 10:46:27 AM



Item ID: D4153-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Joggle Bracket

Start Date: 7/5/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 7/19/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



Packaging

Memo

0.00

0.00

Packaging

11/17/25 (4)

170



QC

Quality Control

QC21 - Final Inspection - Work Order Release

Memo

0.00

0.00

11/27/26
11.07.25

POSITIVE RECALL

EFFECTIVE 11/07.05 AUTH CP

RELEASED DATE 11.07.26

PER ATTACHE EMAIL
FROM DAVID, SILENT HUNT.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector



Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

FIRST ARTICLE INSPECTION CHECKLIST

Rev	Date	Change	Revised by	Approved
A	10.10.25	New Issue	KJ 	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

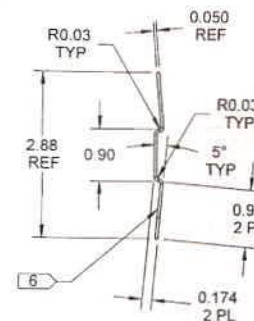
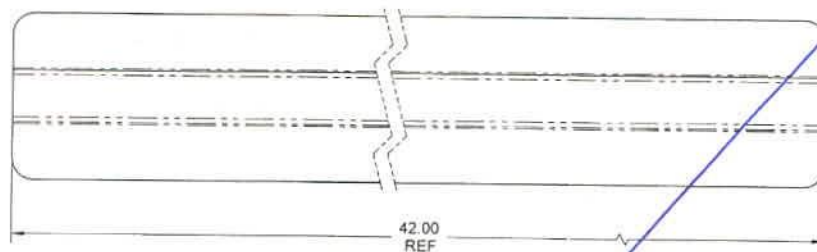
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

#71422



D4153-1 JOGGLE BRACKET
(MAKE FROM D4153-1F FLAT PATTERN)

UNDER REVIEW

10/11/03

RELEASED
2010-09-23

NOTES:

- 1) MATERIAL: MAKE FROM D4153-1F FLAT PATTERN
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1, ON THE UNDERSIDE OF THE PART AS INDICATED
- 7) WEIGHT: 1.82 lbs

A NEW ISSUE		RF	10.09.16
REV.	DESCRIPTION		BY DATE
DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	10	DRAWING NO:	REV. A
MFG. APPR.	15	D4153	SHEET 1 OF 2
APPROVED	10	TITLE	SCALE
DE APPR.	10	JOGGLE BRACKET	NTS
DATE	10.09.16	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No BQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

C

B

A

D

C

B

A

#71420

R0.38
TYP

0.00

BEND LINE

3.00
2.00
1.91
1.09
1.00
0.00

42.00

0.050
REF

D4153-1F FLAT PATTERN

UNDER REVIEW
10/11/03

RELEASED
2010-09-23
NR

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 18 GAUGE (0.050 THICK)
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240
PER DART SPEC M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.82 lbs

DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	NO	D4153	SHEET 2 OF 2
APPROVED	NO	TITLE	SCALE
DE APPR.	NO	JOGGLE BRACKET	NTS
DATE	10.09.16	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COMMUNITIES TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

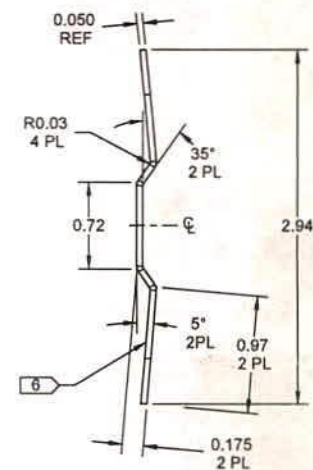
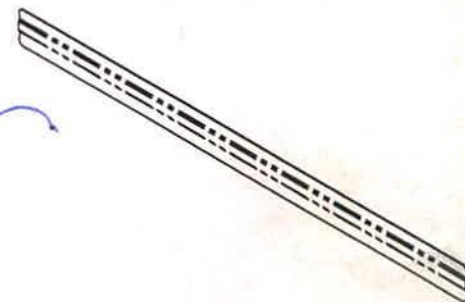
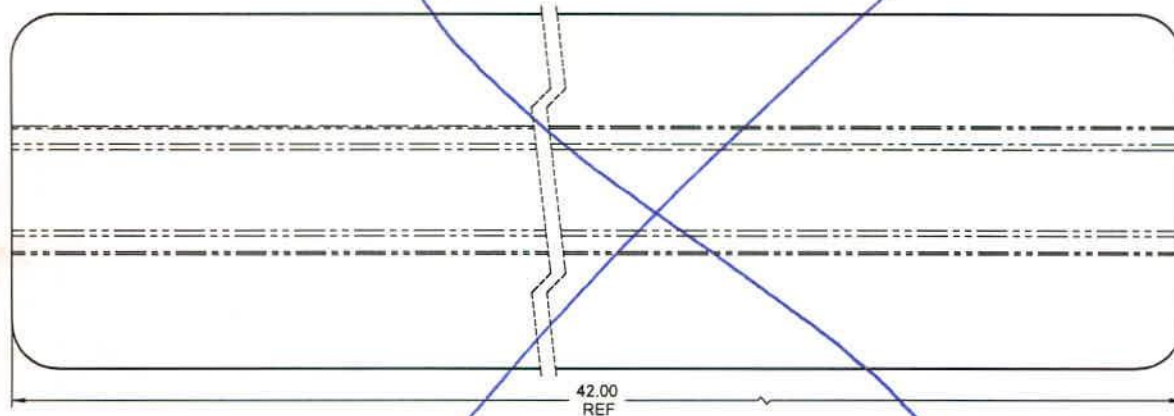
DART AEROSPACE LTD		Work Order:	71422
Description: Joggle Bracket		Part Number:	D4153-1 Bent
Inspection Dwg: D4153	Rev: PB1	Page 1 of 1	

☒ First Article ☐ Prototype

[illegible]

Measured by:		Audited by:		Prototype Approval:	N/A
Date:		Date:		Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



D4153-1 JOGGLE BRACKET
(MAKE FROM D4153-1F FLAT PATTERN)

△ PB1

PRELIMINARY ISSUE

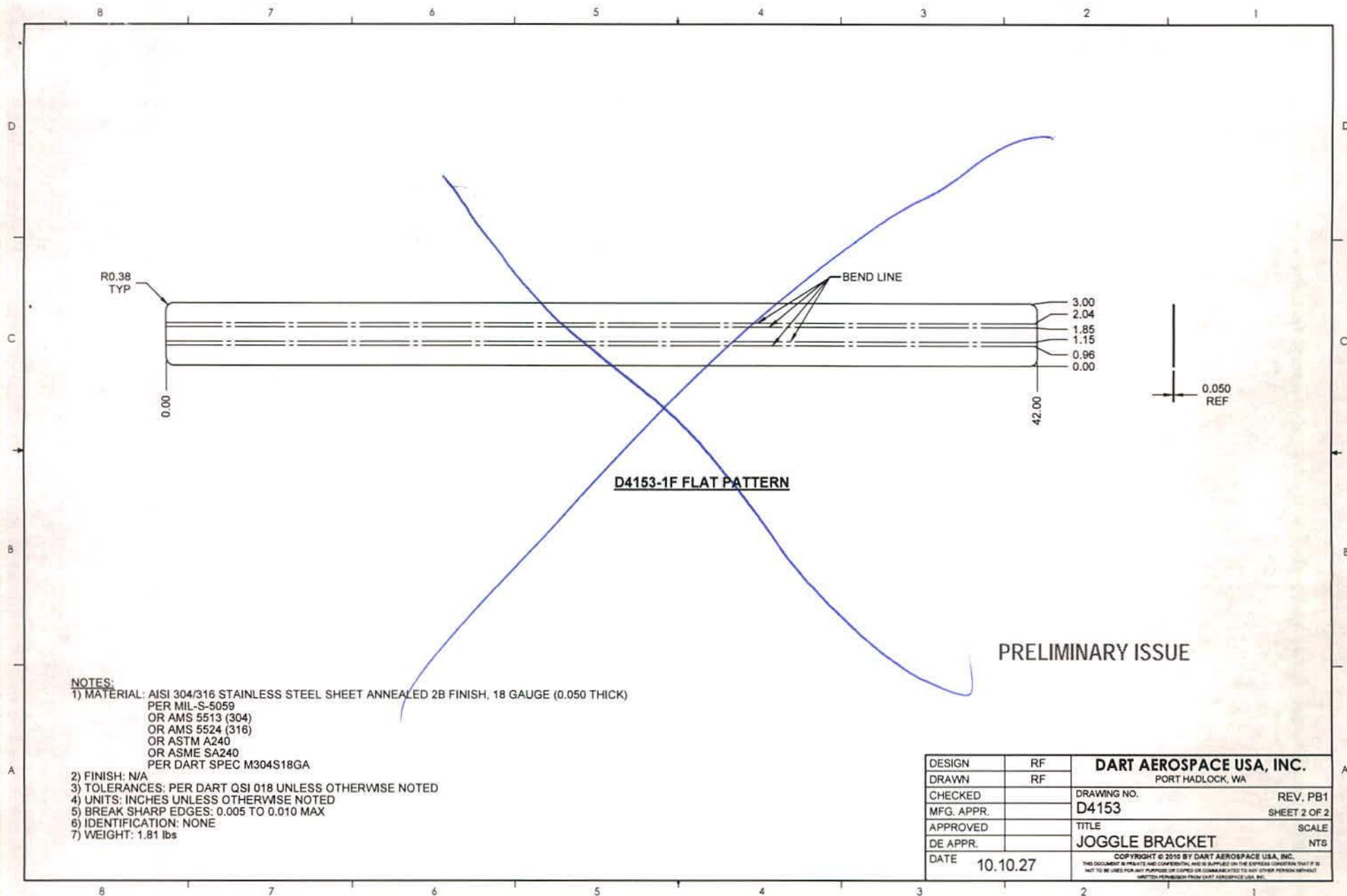
NOTES:

- 1) MATERIAL: MAKE FROM D4153-1F FLAT PATTERN
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1, ON THE UNDERSIDE OF THE PART AS INDICATED
- 7) WEIGHT: 1.81 lbs

PB1	RE-DESIGN	RF	10.10.27
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.10.27		

DART AEROSPACE USA, INC.	
PORT HADLOCK, WA	
DRAWING NO. D4153	REV. PB1
TITLE JOGGLE BRACKET	SHEET 1 OF 2
	SCALE NTS

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Linda Lacelle

From: David Shepherd <dshepherd@dartaero.com>
Sent: July 20, 2011 11:11 AM
To: 'Linda Lacelle'; 'Robert Fuentes'
Cc: 'Mike Petsche'
Subject: RE: D4153-1

Linda,

As discussed, we are going to be sending out an UNDER REVIEW form that clarifies what to do with some of the AW139 parts. D4153-1 Rev A are acceptable to ship, but there is a change coming.

David

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: July-20-11 5:22 AM
To: Robert Fuentes
Cc: dshepherd@dartaero.com; 'Mike Petsche'
Subject: D4153-1
Importance: High

Is still in Prelim, but all the 139's are released...??? Need to ship next week..

Thank You,
Linda Lacelle
Production Manager
Dart Aerospace Ltd
Hawkesbury, ON
Phone: 613 632 9577
Fax: 613 632 1053
Cell: 613 676 1655

Kim Johnston

From: David Shepherd <dshepherd@dartaero.com>
Sent: Friday, July 22, 2011 1:00 PM
To: 'Linda Lacelle'; 'Roberto Fuentes'
Cc: Mike Petsche; 'Kim Johnston'
Subject: RE: Under Review - D4092, D4093, D4153, D4074 and D4131

Linda,

As discussed:

- a) D4092/D4093 should not be manufactured as is
- b) There are changes coming on D4153 and D4131, but it is acceptable to manufacture and release parts that are made per per D4153 Rev A and D4131 Rev A
- c) All D4074-X parts must be manufactured per D4074 Rev B ... There is no change to D4074-1/-5 but changes are required to D4074-3/-7. D4074 Rev B should arrive in Hawkesbury today.

Hope this clarifies the situation ... Sorry for any confusion.

David

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: July-22-11 7:16 AM
To: 'Roberto Fuentes'
Cc: dshepherd@dartaero.com
Subject: RE: Under Review - D4092, D4093, D4153, D4074 and D4131

I have kits to ship next week, and more the week after, when is 4074, 4153 and 4131 all going to be released??

L

From: Roberto Fuentes [mailto:rfuentes@dartaero.com]
Sent: July 20, 2011 11:45 AM
To: Linda Lacelle
Cc: 'Stocker, Alan'; 'Beckett, Bill'; 'Golden, Brigitte'; 'Lavoie, Chantal'; 'Provencal, Chris'; 'Campbell, Daniel'; 'Duval, David'; 'Shepherd, David'; 'Charbonneau, Eric'; 'Downing, Eric'; 'Siemens, Harvey'; 'Jean-Francois Sauve'; 'Menard, Jean-Luc'; 'Johnston, Kim'; 'Fauteux, Melanie'; 'Petsche, Mike'; 'Willems, Sian'; 'Bedford, Sue'; 'Sheldon, Susanne'; 'Kerr, Cathy'; Marc Bellavance
Subject: Under Review - D4092, D4093, D4153, D4074 and D4131

Hi everyone,

D4092, D4093, D4453, D4074 and D4131 drawings are now under review per attached form.

Thanks,
Roberto